Datasheet: PHP198

<table>
<thead>
<tr>
<th>Description</th>
<th>RECOMBINANT HUMAN LEPTIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>LEPTIN</td>
</tr>
<tr>
<td>Format</td>
<td>Rec. Protein</td>
</tr>
<tr>
<td>Product Type</td>
<td>Recombinant Protein</td>
</tr>
<tr>
<td>Quantity</td>
<td>1 mg</td>
</tr>
</tbody>
</table>

Product Details

**Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELISA</td>
<td></td>
<td></td>
<td></td>
<td>0.2 - 0.4ng/well</td>
</tr>
<tr>
<td>Western Blotting</td>
<td></td>
<td></td>
<td></td>
<td>1.5 - 3.0ng/lane</td>
</tr>
<tr>
<td>Functional Assays</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

**Target Species**

Human

**Product Form**

Purified recombinant protein - lyophilized

**Reconstitution**

Reconstitute with 1.0 ml distilled water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. For extended storage, the addition of 0.1% bovine serum abumin (BSA) is recommended.

**Preparation**

Purified recombinant leptin expressed in *E.coli*. Sterile filtered through a 0.2 micron filter

**Buffer Solution**

Lyophilized with 0.1% TFA

**Preservative Stabilisers**

None present

**Endotoxin Level**

<1 EU/ug

**Approx. Protein Concentrations**

1.0 mg/ml after reconstitution

**External Database Links**

UniProt: P41159 Related reagents
Entrez Gene: 3952 LEP Related reagents

Synonyms OB, OBS

Product Information Recombinant human leptin is a leptin preparation made in E. coli. Leptin is a major adipose-derived hormone and member of the leptin family, which plays a key role in appetite control and the regulation of energy expenditure.

Secreted leptin associates with proteins within the bloodstream and is transported to the brain, where it inhibits or up-regulates the activity of neuropeptides such as neuropeptide Y (NPY) and alpha-melanocyte-stimulating hormone respectively. Leptin is a recognised marker of obesity, with a correlation between circulating levels of leptin and body fat mass, and defects in leptin production result in severe obesity. Regulators of leptin expression include insulin, cortisol, cAMP and thiazolidinediones.

Protein Molecular Weight 16.0 kDa (147 amino acid residues)

Activity PHP198 is biologically active in the ob/ob mouse obesity model. The ob/ob mice were treated via intraperitoneal injection once daily at a dose of 5 µg Leptin/gm of body weight for 7 days. Significant effects on body weight, food consumption, and plasma glucose levels were observed to saline-treated controls.

Purity >98% by SDS PAGE and HPLC

ELISA Recombinant human leptin may be use as a standard for ELISA applications with purified human leptin antibody (AHP1616).

Western Blotting Recombinant human leptin may be used as the positive control for Western Blotting applications with a purified human leptin antibody (AHP1616).

Storage Prior to reconstitution store at -20°C. After reconstitution store at -20°C. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee Guaranteed for 3 months from the date of reconstitution or until the date of expiry, whichever comes first. Please see label for expiry date.


Regulatory For research purposes only